

Non-Communicable Diseases



Your Heart:

What are they?

How do they form?

Your Heart

- How does it work when it is healthy?
- <http://www.youtube.com/watch?v=84PrHxJri9Q&feature=related>

Cardiovascular/Heart Disease

- ❑ Disease that affects the heart or blood vessels
- ❑ 61 million Americans have a form of the disease
 - ❑ Responsible for 40% of all deaths in the US
 - ❑ Kills 1 million Americans a year

Hypertension

- AKA – high blood pressure, HBp

<http://www.youtube.com/watch?v=fUcLrdPJrU>

- Aneurysm – build up of pressure

Arrhythmias

- Disturbance in the hearts rhythm

<http://www.youtube.com/watch?v=xw4nDMgTOrw>

Fibrillation

- A rapid twitching of muscle fibers – “V-fib”

Animation:

- <http://www.youtube.com/watch?v=zkLQnQsXmzE&feature=related>

V-fib, real heart:

- <http://www.youtube.com/watch?v=AnTyPtVkAbg&feature=related>

V-fib with shock, real heart:

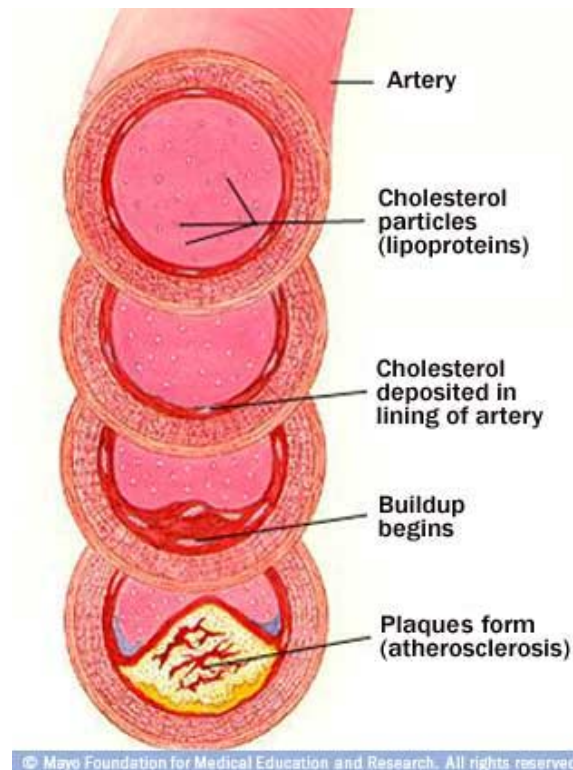
- <http://www.youtube.com/watch?v=6KC8BCgaZ5I&feature=related>

Arteriosclerosis

- ❑ Artery walls thicken, harden and lose elasticity
- ❑ <http://www.youtube.com/watch?v=OHE1ig4k64M>

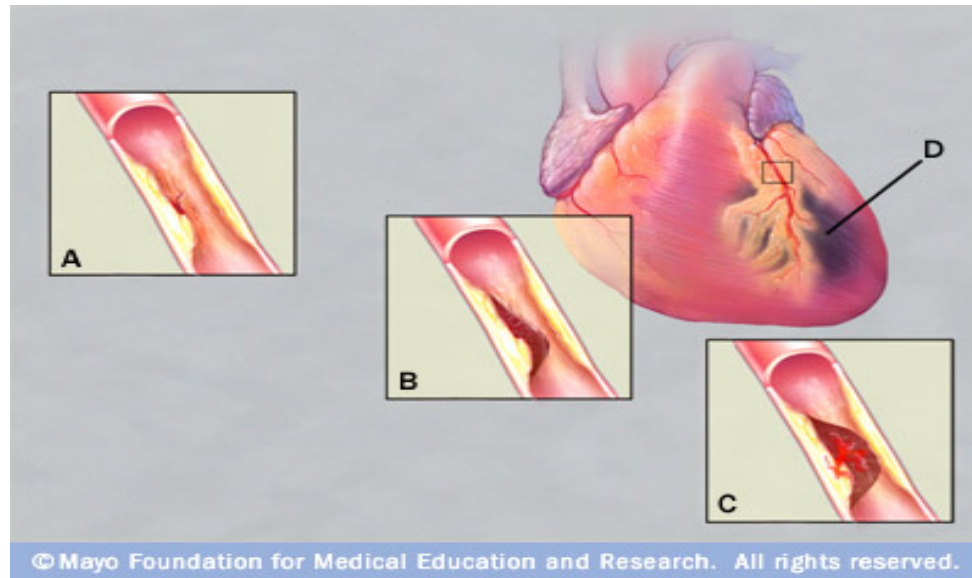
Atherosclerosis

- ❑ Plaque accumulates on the artery walls
- ❑ <http://www.youtube.com/watch?v=qRK7-DCDKEA&feature=related>



Heart Attack

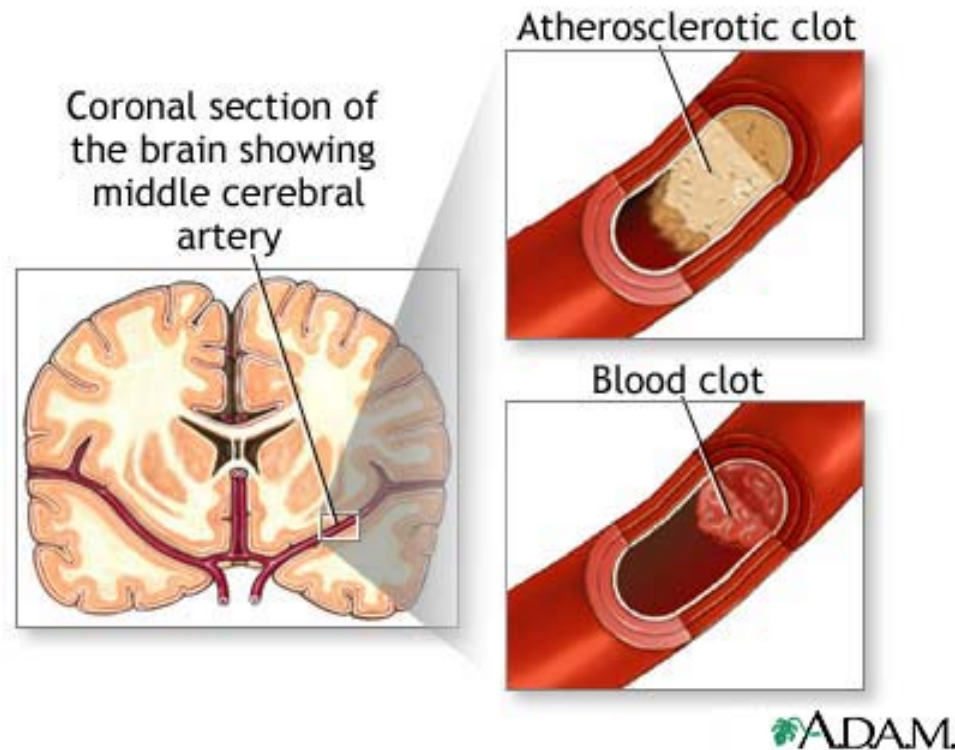
- A heart attack occurs when an artery supplying your heart with blood and oxygen becomes blocked.
 - **Angina Pectoris** - Chest pain that results when the heart does not get enough oxygen



- <http://www.youtube.com/watch?v=DGxS44-rcps>

Stroke

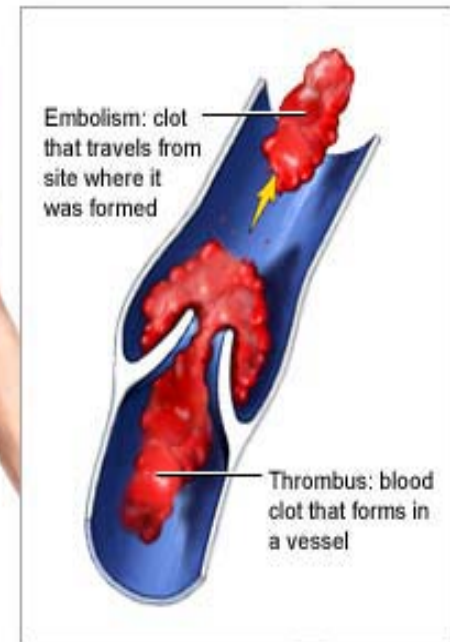
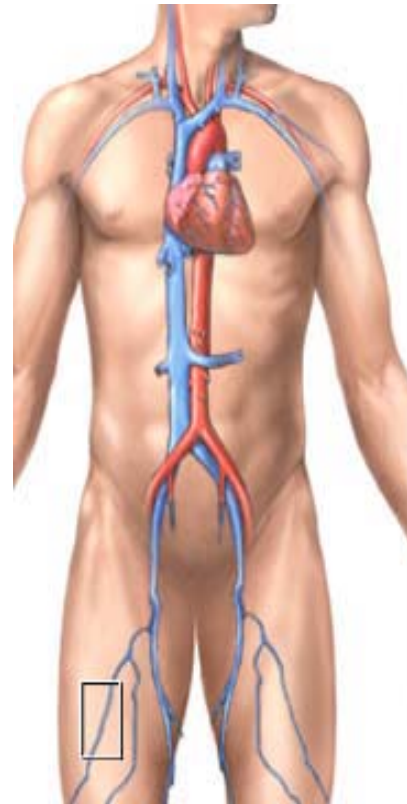
- When arterial blockage interrupts the flow of blood to the brain



<http://www.youtube.com/watch?v=6h7Frkj96yM&feature=related>

Abnormal Blood Clotting

- 2 types:
 - **Thrombus** – platelets stick to plaque and cut off the blood supply
 - **Embolus** – traveling blood clot
 - **Embolism** – blockage of a small vessel



ADAM.

<http://www.youtube.com/watch?v=yyZZajGDXlE&feature=related>